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# Newsletter

December  
1998

Volume 45

Number 1

*F*irst, we want to wish everyone a happy holiday season and be thankful for getting through the El Niño year with relatively few problems, compared to other parts of the country. Hopefully, La Niña will be as mild on Montana.

## A Note From the Administrator:

This next year will be very challenging with several unknowns. Particularly, preparing for Y2K issues and seeing what the resulting effects of CI-75 will be. We expect these challenges to create opportunities for us to put together our skills and knowledge in an effort to find workable solutions.

Happy Holidays!!!

Jim Greene  
Administrator



STATE DOCUMENTS COLLECTION

MAR 0 1999  
MONTANA STATE LIBRARY  
1515 E. 6TH AVE.  
HELENA, MONTANA 59620

Pat Brannon of the Department of Transportation leads his team in learning about the effects of terrorism in Montana at the 1998 Fall Training Conference in Glasgow.



STATE OF MONTANA  
DISASTER & EMERGENCY SERVICES



PLEASE RETURN

H

still a lot to add, there is currently an abundance of information available to you. To access the site directly, go to [www.state.mt.us/dma/des](http://www.state.mt.us/dma/des) - you can also access it through the State of Montana's Home Page at [www.mt.gov](http://www.mt.gov). Please share your thoughts and ideas with me about this site. It is intended to be as user-friendly and information-packed as possible. Let me know what you think.

The most important thing I have to report for this issue is that DES finally has a web site. Although there is

Take care and have a safe and happy holiday season.

Until Next Time!  
Monique T. Lay  
Newsletter Editor

Visit Our New Web Site  
www.state.mt.us/dma/des

Seasons Greetings



# It's a Good Thing

**I**t's 1:00 p.m. January 22, 27 degrees and the snow around the buildings is starting to pile up. There is an 80 percent chance that the snow showers will continue throughout the day. The high school wrestling and volleyball teams have left for tournaments in towns 60 and 90 miles away in three of the town's seven school buses. The boiler at the elementary school belches black smoke, sending it throughout the building at the elementary facility, and bursts into flames. The elementary school follows the fire drill exit rules and assembles in the parking lot. All the occupants from the elementary school got out of the school without injury.

Now what? We have 300 students and teachers standing out in the parking lot, it's snowing, their source of communication is in the buildings they just evacuated and not everyone was able to grab a coat.

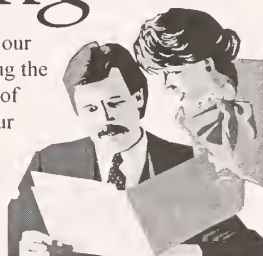
Unlikely scenario? I don't think so. This could happen anywhere in Montana. Are our schools prepared? Have they even thought, much less planned beyond "the parking lot"?

## Thank You!

Thank you to the following for contributing to this newsletter:

Jim Greene, Marlys Cain, Steve Knecht, Fred Naeher, Bill Thomas, Bernard K. Barton, Jolene Jacobson, Jim Kraft, and Martha Smith

The majority of our population during the day in the State of Montana is in our schools and that population for the most part is under 18 years of age. We



need to be a part of planning for their safety.

A working team from the Association has, with input from OPI, the Fire Training School, teachers and other school personnel, put together a draft legislation that addresses the issue of school planning. We were told by the representative from OPI that if there is not a law requiring the schools to plan, the schools will not do it. In the long run, this law will help us to get the schools involved in our community emergency plans and exercises.

It is time to contact your local representatives and discuss this legislation with them. You will be accomplishing two things: making contact with your legislators over an issue that is for the good of the children in our state, and educating our legislators about emergency management.

This is a positive, pro-active issue for the Association to support. Isn't that what we are all about?

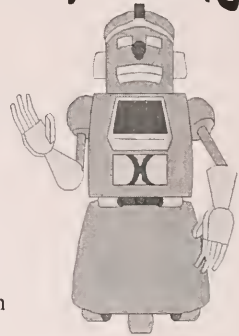
It's a good thing.

Martha Smith, Emergency Manager  
Sanders County

# 21st Century Disasters

**D**isaster researcher Clair Rubin, in a recent paper entitled "What Hazards and Disasters are Likely in the 21<sup>st</sup> Century – or Sooner?" lists the following new hazards and threats:

1. Events and conditions that exacerbate existing technological hazards;
2. Greater, more deadly impacts of natural hazards – including weather events;
3. Less confidence in security for physical facilities, information systems, and databases;
4. Human error – intentional and unintentional;
5. Biological and chemical hazards, including biotechnology hazards and marine toxins
6. Terrorism;
7. Distant (international) sources of disasters.



Regarding telecommunications failures, for example, Dr. Rubin notes that most of the country's vastly expanding volume of paging messages are relayed around the country by a single satellite. "When it failed, close to 90% of the 45 million U.S. paging customers (including emergency managers and hospital personnel) found themselves without service" (*Washington Post*, May 21, 1998)

For the entire article, see website <http://www.colorado.edu/hazards/wp/wp99.html#notes>

Contributed By:  
Bill Thomas  
DES District I Rep

## Visit StatesNews.....[www.csg.org](http://www.csg.org)

Founded on the premise that the states are the best sources of insight and innovation, The Council of State Governments provides the only regional network for identifying and sharing ideas with state leaders. The Council champions excellence in all three branches of state government. The mission of StatesNews is to provide you with weekly and daily CSG and state news. Also through this site, CSG provides easy access to other member services, linking knowledge and products to technology.



# Thanks!

Thanks to all of you who helped make Earthquake Preparedness Month successful. Once again, participation increased; however, the best news is that we had a lot more interest shown by the private sector. YEA! Of course having a few actual earthquakes didn't hurt! This year's event provided over 24,500 brochures, pamphlets, and pieces of literature to individuals throughout the state. We are well on our way to keeping our citizens safer from the effects of earthquakes.

Monique Lay

*A very special thank you to:*

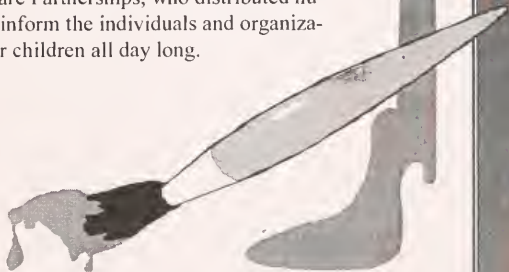
- ♣ Our statewide District Reps who do a great job every day.
- ♣ Paul Spengler and Bob Musselman who made gallant strides in earthquake preparedness in Lewis and Clark County.
- ♣ Alan Marble, who is making great efforts to truly focus on earthquake preparedness in Flathead County.
- ♣ Cindy Mullaney for creating an exercise which proved an effective tool for promoting earthquake awareness in Pondera County.
- ♣ Wilma Puich and her ongoing efforts to educate people countywide.
- ♣ Charlie Comer and his relentless work on Project Impact.
- ♣ Dan Seitsema of Roosevelt County (non-earthquake country) for living through the largest earthquake of the year and sharing his experiences with us.
- ♣ Pat McKelvey for Jefferson County's outreach efforts following their 4.1 trembler.

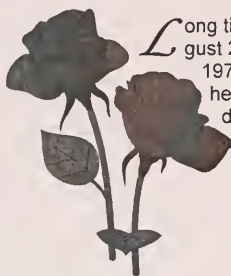
**From the private sector a big thank you goes to:**

♣ KTVH (Channel 12 in Helena) and the Independent Record in Helena for their efforts to unite businesses throughout Lewis & Clark County and the surrounding area in promoting and educating the public in earthquake awareness and preparedness.



♣ And finally, Childcare Partnerships, who distributed numerous fliers to help inform the individuals and organizations who care for our children all day long.






Long time Ravalli County Civil Defense director, Margaret Sullivan died August 28, 1998 at Stevensville. Margaret retired as Civil Defense director in 1978 having served in that capacity for eighteen years. She was 88. She helped research and write "Montana Genesis" which is a history book dealing primarily with the Bitterroot Valley. Margaret was born in Plains, Mt. and her Salish Indian friends called her "Makilee" through her lifetime.

Submitted By:  
Bill Thomas  
DES District I Rep


## Lost at Sea

Last winter, almost five million LEGO pieces were lost overboard from a freighter that was enroute from the Netherlands to New York City. A rogue wave on February 13, 1997 tilted the ship back and forth over a 100 degree arc, freeing 62 enormous shipping containers, one of which held the LEGO pieces.

The spill occurred about 20 miles from Lands End, England. On the beach near Cornwall, England, kids have found some of the seagoing LEGO toys that have washed ashore. Fittingly, most of the toy pieces belong in kits depicting ocean scenarios - scuba divers, flippers, octopuses, life rafts, etc.



Ocean current researchers (Ebbesmeyer, 1997) estimate that beachcombers in America may find some of these LEGO pieces along the coasts of Florida, Georgia and the Carolinas by the summer of 1998. Some of the LEGO pieces may travel northward through the Arctic Ocean, along the Northeast passage and south to Alaska - a journey that could take a dozen years. The currents near Alaska could route the floating toys westward to Japan, then



eastward to the beaches of British Columbia, Washington, Oregon and California. The oceans of the northern hemisphere will probably see an even distribution of the lost LEGO toys by the year 2020.

Is five million LEGO pieces a lot? Not really, when you consider that as of 1996, the Denmark based LEGO group is reported to have produced 180 billion pieces...enough for every person now on the planet to own 30 pieces! It's a good thing that not all of them are adrift!

Note: Beachcombers are encouraged to report finding drifting objects to Dr. Curtis Ebbesmeyer, 6306 21st avenue, Seattle WA, 98115. Visit the Beachcomber's Alert web site at <http://www.beachcombers.org>.

Source  
Ebbesmeyer, C.C., 1997, Rogue wave grabs five million LEGO toy pieces: Beachcomber's Alert, The Beachcomber's and Oceanographer's Association, Seattle, Washington, Vol.2, no.2, pp 5-6.

Story by S. Welch



Nineteen  
ninety-eight

## Confederated Salish and Kootenai Tribes annual report

was an eventful, productive year for Tribal DES according to Tribal Emergency Manager Lloyd Jackson. Some accomplishments included: recertification of 46 tribal and fire department employees to Hazmat Operations level; sponsoring of the 5<sup>th</sup> annual Hazmat Conference which was attended by 126 participants; conduct of several exercises; response to 48 incidents including a large transformer fire at a substation near Hot Springs and retrieval of a scraper from Flathead Lake with assistance

from Tribal DES and Tribal divers. In addition, Lloyd Jackson spoke at a hazmat conference in Sacramento, California and traveled to Las Vegas to speak to a gathering of FEMA/DOT Region VIII representatives and Western State Tribal Disaster Service Administrators.

-- Report submitted by  
Jolene Jacobson, Tribal DES

We're Number  
9-1-1

According to the Department of Administration's Information Services Division, Montana is expected to have statewide 9-1-1 coverage by the end of 1998. When that happens, we will join 15 other states and the District of Columbia with 100% coverage. Their latest newsletter cites these statistics:

**Montana is expected to have statewide 9-1-1 coverage by the end of 1998.**

**15 states with 100% coverage:** California, Connecticut, Delaware, Florida, Hawaii, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Oregon, Rhode Island, Texas, Utah, Washington, and Washington D.C.

**14 states with 90-99% coverage:** Arizona, Colorado, Illinois, Indiana, Iowa, Missouri, Montana, Nevada, New Mexico, North Dakota, Ohio, Tennessee, Wisconsin, Wyoming

**8 states with 80-89.9% coverage:** Alaska, Georgia, Louisiana, Michigan, North Carolina, Pennsylvania, South Carolina, Virginia

**10 states with 70-79.9% coverage:** Alabama, Arkansas, Idaho, Kansas, Kentucky, Mississippi, Nebraska, New York, Oklahoma, South Dakota

**3 states with less than 70% coverage:** West Virginia (59.13%, Maine (50%), and Vermont (48%) However, Vermont and Maine plan to implement statewide E9-1-1 systems in 1999 and 2000 respectively.



# Powell County News

Each year the Montana Wing of the Civil Air Patrol is required to have one of its Search & Rescue exercises dedicated as the Primary. At the Primary SARX, the Air Force sends a team to grade the exercise. A portion of this exercise is also to be set aside for disaster relief. None of the mission staff, pilots, or participating people know the scenario of the exercise except for the Wing L.O. and his trusted agents which feed information.

The search was for a downed aircraft in the Clear Water game range. The disaster relief mission turned out to be very good and realistic. To add reality to the problem, the DES duty officer, Steve Knecht, called the Mission Coordinator in Missoula and requested photos be taken of the mud slide on the Big Blackfoot River. The pictures were taken by digital cameras which are assigned to each CAP aircraft. The quality of the pictures was very good. They will get better with practice. This exercise went extremely well due

to DES' involvement. The evaluators thought it was an actual mission as did the crews until the L.O. advised differently.

This type of damage assessment is available to all counties. If you are interested in how to get this resource for an actual disaster damage assessment, contact me. By the way, the Wing got a grade of excellent and I got some good pictures of the mud slide.



Bernard K Barton  
Powell County DEM  
Director Emergency Service  
Montana Wing CAP

## Is Anyone Interested in the Popular Culture of Disasters?

Jokes and humor, board games and puzzles with disaster themes, folk legends and beliefs about disasters (including Great Flood myths), disaster calendars, songs and poems created at times of disaster, nontraditional predictions (such as the Browning earthquake prediction in 1990), disaster novels and films as well as spoofs of them (e.g. the "Airplane" series), anniversary newspaper issues, on-site graffiti and survivor buttons, certain common photos and video tapes, memorial services, cartoons and comic strips with disaster themes, World Wide Web chat rooms developed around disaster occasions, etc. This is only a partial list, but it conveys what might be considered under the general rubric of the popular culture of disaster. As an intellectual rationale for this project, it can be argued that humor is a powerful coping mechanism, and that popular culture may be the major way most people learn about disasters.

The group focusing on the topic has concluded that disaster popular culture is a worthwhile topic for more systematic exploration (given the limited publications and information of the phenomena mentioned above), and they are seeking others who might be interested in, or knowledgeable about, this topic. The group is currently considering next steps in furthering their interests - including establishing an Internet discussion group and Web site, developing a special issue for a disaster journal, and hosting relevant sessions at professional meetings.

Anyone having an interest, suggestions, contributions, and/or writings on this topic, or who simply wants to be informed of developments, is encouraged to contact E.L. (Henry) Quarantelli, Disaster Research Center, University of Delaware, Newark, DE 19716; (302) 831-6618; fax: (302) 831-2091; e-mail: elqdr@udel.edu.

Passed on from the November 1998 Edition of the  
Natural Hazards Observer (Volume XXIII, Number 2)



# Good Disaster Management

In the last newsletter, we listed principles of good preparedness planning. In the next ten newsletters, we'll summarize ten criteria for good disaster management. The criteria will be summaries of the principles described in the 1996 article "Ten Criteria for Evaluating the Management of Community Disasters" by E. L. Quarantelli, co-director of the Disaster Research Center at the University of Delaware. This brief article will simply list the criteria; future articles will explain them.

## Good disaster management must:

- 1 Recognize correctly the difference between agent (i.e., disaster) and response generated needs.
- 2 Carry out generic functions in an adequate way.
- 3 Mobilize personnel and resources in an effective manner
- 4 Involve a proper task delegation and division of labor.
- 5 Allow the adequate processing of information.
- 6 Permit the proper exercise of decision making.
- 7 Focus on the development of overall coordination.
- 8 Blend emergency aspects with established ones.
- 9 Provide the mass communication system with appropriate information
- 10 Have a well-functioning Emergency Operations Center (EOC)



Contributed By:

Bill Thomas

DES District I Representative

# PDS

Congratulations to:

*Dan McGowan*

*Helena Conradsen*

*Wilma Puich*



*for their completion of the Professional Development Series. For more information on the PDS, please see the State DES Training Catalog, or contact Fred Naeher at 841-3968.*

# I forgot my PASSWORD!



**H**ave you ever forgotten your computer password? Do you have difficulties coming up with something to use that is more complicated than the obvious, such as your name or address? Here are a few tips and ideas from ISD's September 1998 edition of News & Views, written by Lynne Pizzini.

☞ Passwords should not be written down where they can be found by unauthorized personnel and should not be shared with other individuals.

☞ Passwords should not be obvious or easily guessed (userID, user name, address, birth date, child's name, spouse's name).

Here are a few tips for creating passwords that you can remember:

- ☞ Create a phonetic sentence using the pronounced sounds of the letters, numbers, or special characters.

110D24GET I tend to forget.  
187#2DAY I ate seven pounds today.

- ☞ Concatenate short, unrelated words and add a number to it somewhere.

GO6CAT2SAY  
BLACK7AND

- ☞ Use the first letter of each word in a poem or song until you have enough letters and add a number or substitute a number for a letter.

JAJ4WUTH Jack and Jill went up the hill.  
HINSNJA Help! I need somebody.  
Not Just anybody.

- ☞ Mirror a work (in either direction); repeat process or truncate letters as needed to get appropriate length and add a number to it somewhere.

JUST5TSUJ  
BOY7YOB7BOY

- ☞ Take a word from the dictionary that is long enough to qualify as a password. Replace all the vowels with numbers or special characters.

M\$Rn\$NGS Mornings  
PS1CH1T1C Psychotic



You can now watch EENET on your computer! Many broadcasts are available via the Internet. For the many public safety personnel who do not have access to satellite downlink sites, this may be a great alternative. For details, visit the EENET web page at:

[www.fema.gov/emi/eenet.htm](http://www.fema.gov/emi/eenet.htm)



## Correction to: EMI Schedule of Courses Brochure

The wrong application was attached to the EMI schedule that was sent out early in July. A new revised schedule has been printed (revised 7/98 in the upper left-hand corner) with the correct FEMA Form 75-5, General Admissions application, and is currently being distributed. Please destroy all copies of the first schedule. If anyone submits the short form (FEMA Form 75-5A), their application will be returned.

# Practice Makes Perfect!



The Weapons of Mass Destruction Exercise held at Fort Harrison on August 28, 1998 provided some valuable information to the participants.

**DON'T CHEAT BY SCROLLING DOWN FIRST!!!**

It only takes 30 seconds. Get out your calculators...

>>> Work this out as you read but **DO NOT** refer to the bottom until you have done the calculations!!! Follow these six steps and this will amaze you...

Just for Fun

1. First of all, pick the number of days a week that you would like to go out (or eat pizza, whatever).

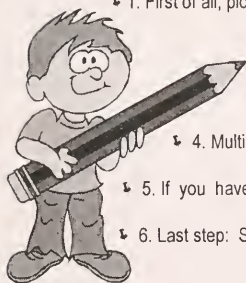
2. Multiply this number by 2.

3. Add 5.

4. Multiply it by 50.

5. If you have already had your birthday this year, add 1748. If you haven't, add 1747.

6. Last step: Subtract the four digit year that you were born.



$\times 2$

$+ 5$

$- 1748$

**SEE BELOW FOR RESULTS:**

>You should now have a three digit number:

>The first digit of this was your original number (i.e. how many times you want to go out each week).

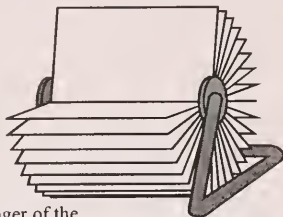
>The second two digits are your age!!!

>This is the only year (1998) it will ever work, so spread the fun around by mailing this to your pals.

## New Points of Contact

Roger Running Crane is the new point-of-contact for the Blackfeet Nation, he is replacing Gabe Grant.

Roger Running Crane  
Blackfeet Tribal Business Council  
Vice Chairman  
P.O. Box 850  
Browning, MT 59417  
e-mail [btbc@3rivers.net](mailto:btbc@3rivers.net)  
(406) 338-7179 office  
(406) 338-7530 fax



GNPS has not appointed a chief ranger of the east side of Glacier Park. Fred Vanhorn is currently the point-of-contact.

Fred Vanhorn  
Protection Specialist  
Glacier National Park  
P.O. Box 128  
West Glacier, MT 59936  
e-mail [Fred\\_Vanhorn@NPS.GOV](mailto:Fred_Vanhorn@NPS.GOV)  
(406) 888-7822 office  
(406) 888-7808 fax

For all of you who may stop by to see Pat Hansen in Sweet Grass County, his office has now officially moved to the Old Hospital Building at 5th and Hooper Street in Big Timber. All his information remains the same except you can now find him at his new place of business.

Visit our new DES Web Site

[www.state.mt.us/dma/des](http://www.state.mt.us/dma/des)

## e-mail Updates:

### Richland County

Butch Renders ..... [Butch\\_Renders@msulink.montana.edu](mailto:Butch_Renders@msulink.montana.edu)

### Gallatin County

Mike Hoey ..... [scaptain@bozeman.net](mailto:scaptain@bozeman.net)

### Dawson County

Helen Conradsen..... [dawcodes@midrivers.com](mailto:dawcodes@midrivers.com)

### New State Office Domain .....@state.mt.us

Individual addresses will remain the same but the domain will change.  
*Example:* [mlay@mt.gov](mailto:mlay@mt.gov) is now [mlay@state.mt.us](mailto:mlay@state.mt.us) - The old addresses will remain operable for an undetermined amount of time.

# DES Bulletin



# Merry Christmas



Board!



# HOLIDAYS!

December 14.....Hanukkah  
December 21..... First Day of Winter  
December 25.....Christmas  
December 31.....New Year's Eve  
January 1.....New Year's Day  
January 18.....Martin Luther King, Jr.  
February 12.....Lincoln's Birthday  
February 14.....Valentine's Day  
February 15.....President's Day  
February 22.....Washington's Birthday

# WINTER

## District VI Update

Mark Gruener Business Phone: 538-6166

## County Updates

### Blaine County:

New Deputy: Michael W. Woolridge  
BUS: 265-0355  
CELLULAR: 265-0870  
FAX: 265-0356

### Wibaux County:

Frank Datta:  
24 HOUR: 796-2222  
FAX: 796-2218

### Dawson County:

Helen Conradsen  
Business Phone: 377-2566  
FAX: 377-2022

### Cascade County:

New Deputy Coordinator  
Ryan "Buck" Burke  
P.O. Box 458  
Great Falls, MT 59403  
Cellular: 788-3871



# Seismic Design and the Murrah Building

From the MCEER News:

According to an article in the July 1998 issue of ASCE News, W. Gene Corley, testified in June on behalf of the American Society of Civil Engineers (ASCE) before the public buildings and economic development subcommittee of the House Committee on Transportation and Infrastructure. In the testimony, Corley asserted that "[i]f the [Murrah] building, constructed in 1976, had been built using today's seismic building details, as much as 50% to 80% of the structural damage could have been prevented, thus saving many lives." Corley went on to say that a majority of the fatalities were caused not by the force of the bomb blast itself, but by the progressive collapse of the building's floors, which depended on the support of a few key columns that the bomb destroyed." Corley advised that seismic design details, such as special moment frames or dual systems, could build redundancy and toughness into the design. Consequently if some supports are damaged by a blast, other supporting mechanisms could carry most of the loads. Finally, according to Corley, "[i]f we use some of today's seismic building design details on new federal or other office buildings, we can reduce much of the damage and potentially save a lot of lives. And it will only add 1% to 2% more to the total cost of the structure."

"[I]f the [Murrah] building, constructed in 1976, had been built using today's seismic building details, as much as 50% to 80% of the structural damage could have been prevented...."

A joint ASCE/FEMA publication, *The Oklahoma Bombing: Improving Building Performance Through Multi-Hazard Mitigation* (1996) makes recommendations for designing new buildings and retrofitting existing ones based on methods to mitigate wind and earthquake damage. This publication is available at no charge from:



FEMA Distribution Center

Box 2012

8231 Stayton Drive

Jessup, MD 20794

Telephone: 800-480-2520 or 202-646-3484

Fax: 301-497-6378

Contributed by Jim Greene

Provided by WSSPC



Check out this web site for current  
earthquake information in Montana.



<http://quake.wr.usgs.gov/QUAKES/CURRENT/montana.html>

# FEMA Disaster Preparedness Library Online and on CD-ROM

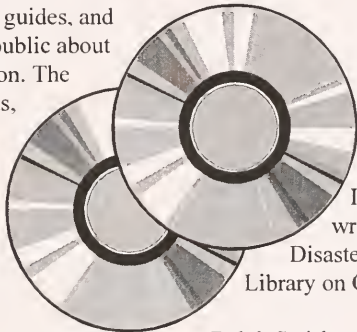
## From the MCEER News:

The FEMA web site at <http://www.fema.gov> contains a virtual library of disaster preparedness materials, including brochures, fact sheets, activity guides, and other resources for educating the public about disaster preparedness and mitigation. The library contains materials on floods, earthquakes, hurricanes, winter storms, wildland fires, and other disasters. Many of the materials are co-produced by the American Red Cross and the National Oceanic and Atmospheric Administration (NOAA).

What's new is the FEMA Disaster Preparedness & Mitigation Library on CD-ROM. This CD-ROM library contains ready-to-print materials on multiple hazards, disaster preparedness, mitigation, and response and recovery, as well as new brochures on how to reduce financial hardships caused by disasters. In addition, it contains planning guidance for businesses and manufacturers, and FEMA's Good Ideas Book, which includes activities, case studies, and resources for educating children, homeowners, and others. This CD-ROM is specifically designed for disaster educators who provide information about multiple hazards and who want to produce high-quality educational materials at a professional print shop. Those wishing single copies of these materials can obtain them from the FEMA web site, as listed above.

In the United States and Canada, the FEMA Disaster Preparedness & Mitigation Library on CD-ROM can be obtained free of charge from:

FEMA Publication Distribution Center  
PO Box 2012, 8231 Stayton Drive  
Jessup, MD 20794-2012  
Telephone: 800-480-2520  
Fax: 301-497-6378

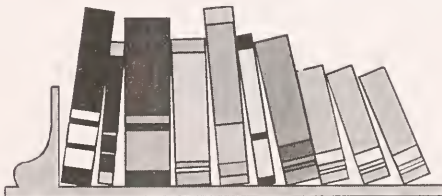


International users can place written requests for the FEMA Disaster Preparedness & Mitigation Library on CD-ROM from:

Ralph Swisher  
Program Manager  
Community & Family Preparedness Program  
Attention: Publications Requests  
FEMA  
500 C Street, SW  
Washington, DC 20472  
E-mail: [ralph.swisher@fema.gov](mailto:ralph.swisher@fema.gov)

Again, there is no cost for these materials, whether sent to domestic or international addresses.

Submitted By:  
Jim Greene  
Provided By: WSSPC



# More... Y2K

**A**s the Millenium Bug continues to cause concern, we have compiled some information to help you become familiar with and work with

this problem. If you do not have access to the internet, please contact our office and we will provide you with some hard copy information. In addition, the DES Advisory Committee will meet on December 15 and will include Y2K as part of their discussion. A workshop will also be included at our next Governor's Conference. It is tentatively scheduled for Thursday morning.

## To Do List:



### Computers:

Run a diagnostic program on your home computers to make sure they are Y2K compliant. Diagnostic programs are available at computer stores or for download at:

- The Federal Reserve Board  
[www.bog.frb.fed.us/y2k/pctesting.htm](http://www.bog.frb.fed.us/y2k/pctesting.htm)
- National Software Lab  
[www.nstl.com/html/ymark\\_2000.html](http://www.nstl.com/html/ymark_2000.html)
- Viasoft - onmark.viasoft.com

### Software:

Check with manufacturers of frequently used software programs to find out whether they are Y2K compliant.

### Operating systems:

- Windows 98 is compliant, but Windows 95 and Windows 3.1 are not. (Patches can be downloaded from Microsoft's Website to fix the problems).  
[www.microsoft.com/y2k](http://www.microsoft.com/y2k)
- Apple says all of its computers made since 1984 are fully Y2K compliant.  
[www.apple.com/macros/info/222.html](http://www.apple.com/macros/info/222.html)

### Web browsers:

- Netscape Communicator 4.0 and beyond are fully compliant; so are Netscape Navigator 2.02 & 3.0.
- Microsoft Internet Explorer 4.0 for Windows and Macintosh are fully compliant. Internet Explorer 3.0 for Windows has some minor problems. Internet Explorer 3.0 for Macintosh is still testing; compliance uncertain.

### Other popular software:

- Intuit, makers of the popular financial software, Quicken.  
[www.intuit.com/support/year2000](http://www.intuit.com/support/year2000)
- Norton, maker of utilities and antivirus programs.  
[www.symantec.com/y2k/y2k.html](http://www.symantec.com/y2k/y2k.html)

### Financial preparations:

- Make backup paper records of all your financial dealings. Include payment records for credit cards, bills and loans.
- Have enough travelers checks or cash on hand to get you through a long weekend, more if you feel concerned your bank may not be year 2000 compliant.

### Automated home systems with embedded chips:

- Check with manufacturers of garage doors, elevators, heaters and coolers. Find out whether they include calendar systems and, if so, whether they are Y2K compliant

### Home medical devices:

- Ask your doctor. Insist on an answer. (Note: Items such as heart monitors, pacemakers and infusion pumps do not have calendar functions, but computers that collect information from them might not be compliant.)

### Emergency kit:

- Put together a kit containing flashlights (with fresh batteries), food that doesn't need to be heated, and enough bottled water to get you through a few days, just in case the power in your area temporarily goes out.

### Misc. Web sites for more information:

<http://www.wa.gov/dis/2000/links/menu1.htm>

A great site which will link you to a vast culmination of Y2K info. You should be able to find anything here.

[www.fema.gov/library/y2k1002.htm](http://www.fema.gov/library/y2k1002.htm)

FEMA's involvement with Y2K is growing and this site will provide you with the information they have regarding the issue.

[www.emassociation.org/](http://www.emassociation.org/)

Provides information targeted to the local emergency manager. It includes checklists, plans and other useful tips. This site is updated frequently.

*(Continued on page 17)*



# Independent Study Courses

The following Independent Study courses will soon be available for distribution through our state office:

IS-11 Animals in Disaster

IS-195 Basic Incident Command

IS-279 Retrofitting Flood Prone Structures

IS-393 Introduction to Mitigation

We currently have on hand for "same day" mailing:

IS-1 Emergency Program Manager

IS-2 Emergency Preparedness, USA

IS-5 Hazardous Materials: A Citizen's Guide

IS-7 A Citizen's Guide to Disaster Assistance

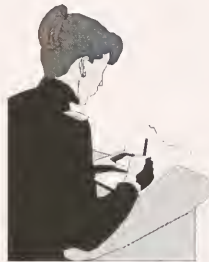
IS-8 Building for the Earthquakes of Tomorrow

IS-120 An Orientation to Community Disaster Exercises

IS-195 Basic Incident Command Course

IS-275 The Role of the EOC in Community Preparedness, Response & Recovery

For all Independent Study Courses, listed above or not listed, you can apply directly to EMI using the brochures that were mailed out to all DES Coordinators/Emergency Managers.



*(Continued from page 16)*

[www.erols.com/steve451/impact.htm](http://www.erols.com/steve451/impact.htm)

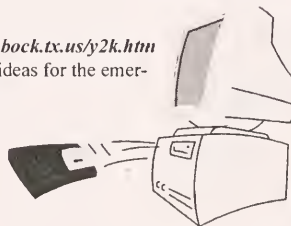
Another great site for emergency managers and various public safety people. Information includes planning, preparedness, the threat from embedded systems, and a host of other topics.

[www.y2k.com](http://www.y2k.com)

This site addresses Y2K legal issues as well as the management issues that may result from the Y2K problem.

<http://y2k.ci.lubbock.tx.us/y2k.htm>

Handy tips and ideas for the emergency manager.



# YELLOWSTONE COUNTY

## Disaster Awareness Month

Throughout the month of October, Yellowstone County and the Red Cross coordinated three weeks of activities, recognizing October as Disaster Awareness Month. Lead by the efforts of Jim Kraft, the event was successful and a positive opportunity to educate the citizens of his county. The following press release went out to begin the multitude of events planned throughout the month. Great job, Jim!

### Statement and Awareness

Disaster can strike quickly and without warning. With the continuing rise in local and world disasters, it is crucial that we be prepared for such an event. Even true emergencies can be modified by good planning and preparation.

### Disasters Happen...Are You Prepared?

Join us in a community-based event sponsored by the Midland Empire Chapter of the American Red Cross, its eight -county jurisdiction\* and the Local Emergency Planning Committee of Yellowstone County\*\* in designating **OCTOBER** as "**DISASTER AWARENESS MONTH**".

### Local Emergency Planning Committee of Yellowstone County (LEPC)

#### Purpose and Objectives

To serve as a forum for exchange of information and experience relating to emergency planning and community right-to-know. To promote and provide positive relationships among industry, private, and government sector resources to mitigate, prepared, respond and recover from all emergencies and disasters that can occur in Yellowstone County.

### The Mission of the American Red Cross

The American Red Cross, a Humanitarian Organization led by volunteers and guided by its Congressional Charter and the fundamental principles of the International Red Cross Movement, will provide relief to victims of disaster and help people prevent, prepare for, and respond to emergencies.

**Weekly events will include:** Fire Prevention Week, "The Great Escape" Contest, National Winter Weather Awareness Week, Emergency Siren Test, Yellowstone County Tabletop Exercise, Mock Disaster Exercise, Disaster Awareness and Family Emergency Preparedness Exp., and Community Awareness Evaluation.

*\*Yellowstone, Carbon, Musselshell, Big Horn, Treasure, Rosebud, Stillwater, and Golden Valley County DES Coordinators*

*\*\*American Red Cross, Yellowstone County DES, American Medical Response, Deaconess, St. Vincent, Fire Departments, Police and Sheriff Departments, National Weather Service, Exxon, Cenex, Schools, Montana Department of Transportation, Montana Safety Services Council, Montana Search and Rescue, and Yellowstone Radio Club.*

After a traumatic event, disaster, or critical "incident," your first response will likely be your own employees. Teach your employees how to provide effective, immediate support.

Immediately protect employees from additional trauma and stress (dangerous areas, witness rescue of injured persons, media intrusion, etc.). Shelter them from seeing dead or injured persons being removed.

## Psychological First Aid

Direct employees to secured areas away from outside influences and exposures:

- Identify a place to have appropriate employees congregate.
- Smaller rooms feel safer than large, open areas.
- Monitor doorways to ensure unwanted outsiders don't enter, e.g. media, attorneys.

Make contact with victims, witnesses and others experiencing traumatic stress (dazed, confused, shocked, stunned, crying, hyperactive, shaking, or visibly upset).



### TELL THEM

"You are safe now."  
"It is over."  
"You survived."  
"You're experiencing a traumatic stress reaction."  
"It's O.K., let it flow."

### ASK THEM

"How were you involved in the incident?"  
"What did you see? Hear? Experience?"  
"Are you injured in any way?"  
"What do you need?"  
"What can I do to help you?"

Touching is typically helpful - but it must be natural and appropriate.

Assist them with issues of immediate concern, such as a drink of water, a blanket, an offer to retrieve personal items or contact a spouse or other family member.

Give them information about what happened - they desperately need the facts:

- Dispel rumors or misunderstandings.
- Be forthcoming, but be careful not to give information that will increase anxiety.

### Assessment

Ask "How were you involved in the incident?"

Ask, "are you aware of anyone who is more significantly affected than others?"

Then ask, "What kind of reactions are you having now?"

### If Adequately functioning:

Enlist them to assess others and direct these people to safety.

Ask that a list of "at risk" individuals be conveyed to you.

Have them stay with persons needing constant comforting.

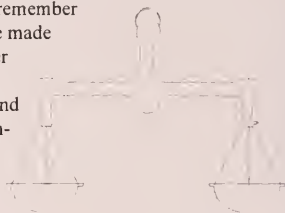


Written by Dan Paulk  
Excerpted from the  
1998 Edition of the  
Disaster Resource Guide

# Richter Vs. Mercalli Which is Better?

know the difference and didn't, here it is. If you never knew there was a difference, you've just received yet another bit of knowledge to add to your already vast brilliance. The easiest way to remember the difference: The Modified Mercalli Scale is tangible, the measurements can be made simply by viewing the effects of the earthquake. Anyone can do this. The Richter Scale is a formula that measures the amount of energy released by the earthquake. This must be done by a seismograph. Both scales are equally important and provide significant information; however, there is no correlation between the numbers in either scale. For a better comparison, the actual scales are included for you on the next page.

BOTH! The most common request I have received this year regarding earthquakes has been to explain the difference between the Richter Scale and the Modified Mercalli Scale. If you have always wanted to



## **The Mercalli Scale: *A Measure of Intensity***

Earthquake intensity is a measure of the effects of an earthquake at a particular place. Intensity is determined from observations of an earthquake's effects on people, structures, and the Earth's surface. A ten-value intensity scale which had been in use in Europe since 1883 was refined in 1902 by an Italian seismologist, Giuseppe Mercalli. The Mercalli scale we use today is a modification of Mercalli's twelve-value scale developed by two Americans, H.O. Wood and Frank Neumann, in 1931. The scale uses Roman numerals from I to XII to rank relative levels of destruction, ground motion, and human impact.

The Intensity (or impact) of an earthquake in a given area will depend on the type of geological structures in the area as well as the type of buildings. Houses built on rock, for example, will receive less damage than houses built on sediments the same distance from a quake's epicenter. Poorly built houses will receive more damage than those that have been reinforced to withstand earthquakes. In general, though, the further a site is from the earthquake's focus, the lower the amount of damage it will sustain.

## **The Richter Scale: *A Measure of Magnitude***

Another method of rating the size of earthquakes is by using scientific instruments to measure the amplitude of body waves and surface waves recorded on seismograms. The amplitude is the height of the wave tracing above the center line on the seismogram. The instrument's reading indicates the amount of strain energy released by an earthquake. This measure is called the earthquake's magnitude. The greater the wave amplitude, the greater the magnitude.

A magnitude scale was devised by the American seismologist Charles Richter in 1935. It uses Arabic numerals. Richter's scale is logarithmic and open-ended; that is, there is no upper or lower limit to Richter magnitudes. Each whole-number increase in the magnitude of an earthquake represents about a thirty-fold increase in the amount of energy released.

The original Richter magnitude scale was devised to measure earthquakes in southern California. Later, however, Richter and his colleague Beno Gutenberg devised a scale to measure distant earthquakes. This scale is based on the amplitudes of surface waves. Body waves from distant earthquakes can also be used to determine magnitude.



## Modified Mercalli Scale:


- |  |  |   |
|--|--|---|
| I People do not feel any Earth movement.   | VI Everyone feels movement.<br>People have trouble walking.<br>Objects fall from shelves.<br>Pictures fall off walls.<br>Furniture moves.<br>Plaster in walls might crack.<br>Trees and bushes shake.<br>Damage is slight in poorly built buildings.<br>No structure damage.   | XI Well built buildings suffer considerable damage.<br>Houses that are not bolted down move off their foundations.<br>Some underground pipes are broken.<br>The ground cracks.<br>Reservoirs suffer serious damage.   |
| II A few people might notice movement if they are at rest and/or on the upper floors of tall buildings.  |  | X Most buildings and their foundations are destroyed.<br>Some bridges are destroyed.<br>Dams are seriously damaged.<br>Large landslides occur.<br>Water is thrown on the banks of canals, rivers, lakes.<br>The ground cracks in large areas.<br>Railroad tracks are bent slightly. |
| III Many people indoors feel movement.<br>Hanging objects swing back and forth.<br>People outdoors might not realize that an earthquake is occurring.  | VII People have difficulty standing.<br>Drivers feel their cars shaking.<br>Some furniture breaks.<br>Loose bricks fall from buildings.<br>Damage is slight to moderate in well-built buildings, considerable in poorly built buildings.   | XI Most buildings collapse.<br>Some bridges are destroyed.<br>Large cracks appear in the ground.<br>Underground pipelines are destroyed.<br>Railroad tracks are badly bent.   |
| IV Most people indoors feel movement.<br>Hanging objects swing.<br>Dishes, windows, and doors rattle.<br>The earthquake feels like a heavy truck hitting the walls.<br>A few people outdoors may feel movement.<br>Parked cars rock.                           | VIII Drivers have trouble steering.<br>Houses that are not bolted down might shift on their foundations.<br>Tall structures such as towers and chimneys might twist and fall.<br>Well built structures suffer slight damage.<br>Poorly built structures suffer severe damage.<br>Tree branches break.<br>Hillsides might crack if the ground is wet.<br>Water level in wells might change. | XII Almost everything is destroyed.<br>Objects are thrown into the air.<br>The ground moves in waves or ripples.<br>Large amounts of rock may move.   |
| V Almost everyone feels movement.<br>Sleeping people are awakened.<br>Doors swing open or close.<br>Dishes are broken.<br>Pictures on walls move.<br>Small objects move or are turned over.<br>Trees might shake.<br>Liquids may spill out of open containers. |  |   |

## The Richter Scale:

### Richter Magnitude

### TNT Energy Equivalent

### Example



1.0	6 ounces	Small blast at construction site
1.5	2 pounds	
2.0	13 pounds	
2.5	63 pounds	
3.0	397 pounds	
3.5	1,000 pounds	
4.0	6 tons	Small Atomic Bomb
4.5	32 tons	Average Tornado
5.0	199 tons	
5.5	500 tons	Massena, NY Quake, 1944
6.0	6,270 tons	
6.5	31,550 tons	Coalinga, CA Quake, 1983
7.0	199,000 tons	
7.5	1,000,000 tons	Hebgen Lake, MT Quake, 1959
8.0	6,270,000 tons	San Francisco, CA Quake, 1906
8.5	31,550,000 tons	Anchorage, AK Quake, 1964
9.0	199,999,000 tons	

## The More You Know...?



Our brilliant DES Coordinators gaining even more knowledge at the 1998 Fall Training Conference in Glasgow, Montana.

If you are tempted by the convenience and prices of Websites selling books, electronics, travel and so on, but you are leery of being scammed, the Council of Better Business Bureaus wants to reassure you. Its Web site, [www.bbbonline.org](http://www.bbbonline.org) lists more than 1,000 Web merchants who have pledged to operate ethically and whose customers haven't reported unresolved complaints to the Council. You can search for vendors by category of merchandise or by the name of a merchant.

## DON'T BE SCAMMED!



Visit Our New Web Site  
[www.state.mt.us/dma/des](http://www.state.mt.us/dma/des)

*Taken from the September 1998  
Edition of Retire with Money*

It's not too late for next time.  
Voter registration on line:  
[www.netvote98.mci.com](http://www.netvote98.mci.com)



The following questionnaire was designed for the customers of the DES Duty Officers. If you have recently, or in the past, had the opportunity to work with the State DES Duty Officer, please complete the form and return it to the State Office. The information will be used to evaluate the quality of our customer service and help us to implement necessary changes to improve our program. If you wish to remain anonymous, that is fine; however, it would be helpful to know who you are in the event we need to clarify any comments you have provided. *As with all of our information requests, you are assured of your privacy!* This questionnaire will only be used to help improve the State DES Duty Officer Program. Thank you in advance for your help.

**Please respond to the following questions:**

☞ Was the D.O. responsive and knowledgeable?

☞ Did the D.O. service help to resolve the situation?

☞ Was there adequate follow up to ensure the information and service was accurate?

☞ Were there any problems in contacting the duty officer?

☞ Did you experience any frustrations that we could work on to resolve?

☞ Do you have any suggestions or comments that would help us improve the duty officer program?

▶ **Name:** \_\_\_\_\_

● **City, State:** \_\_\_\_\_

● **Phone Number:** (       ) \_\_\_\_\_

● **e-mail Address:** \_\_\_\_\_

● **Other:** \_\_\_\_\_

Please return to:  
Steve Knecht, Response Manager  
Disaster and Emergency Services  
1100 North Main  
P.O. Box 4789  
Helena, Montana 59604-4789

OR  
e-mail to: [sknecht@state.mt.us](mailto:sknecht@state.mt.us)

Questions?  
Call Steve at ☎ (406) 841-3961

# S

## ate of Montana

Disaster & Emergency Services Division

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1100 North Main

Helena, Montana 59604-4789

☎ (406) 841-3911

☎ (406) 841-3965

 **First Class Mail**

### SEASON'S GREETINGS

*Montana State Documents  
Distribution Center  
State Library  
DEADHEAD MAIL*

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Articles or questions regarding articles may be addressed to:

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